

Aging and Elderly Care: A Comparison of the History, Current Situation, and Future in the U.S and China

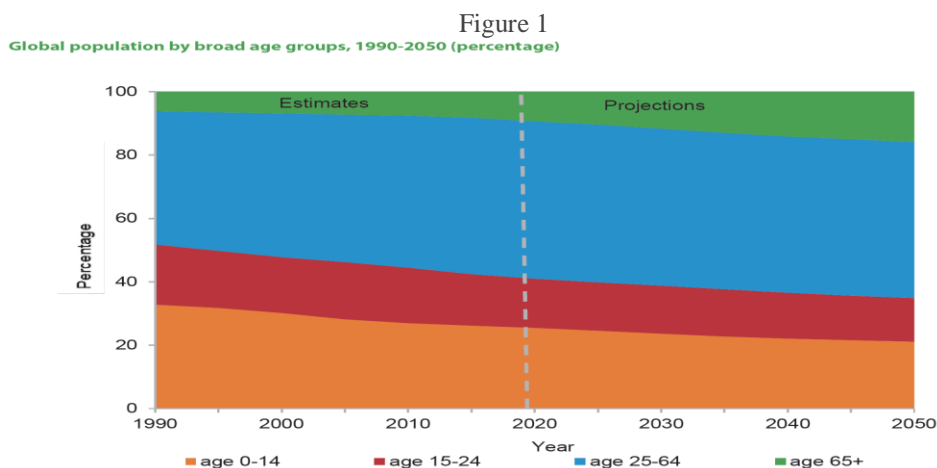
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ABSTRACT: Given the COVID-19 pandemic, which has disproportionately targeted elders, as well as the rapidly increasing aging populations in both the U.S. and China, elderly care has become a most pressing issue. My research investigates how policymakers could better accommodate the unique conditions of U.S. and China aging systems and cope with the effects of COVID-19 on elders. The first part of my paper examines journal articles on demographics, healthcare, past aging policies, the effect of COVID-19, and current aging models in the two countries to gain a better sense of their contents and differences. Then, I outline 5 case studies done in Beijing and Massachusetts through interviews with many stakeholders in the industry—elders, nursing homes directors and staff, and NPOs—to learn their hopes for the future and their understanding of current challenges to the aging system. To conclude, I make specific recommendations according to each country’s aging model: for China, urban areas should employ community-based aging models that would target elder-populated communities at a lower cost while rural areas should receive more funding for welfare programs to send caretakers to each village; in the U.S., community-based programs like PACE need to be expanded into all states and replace institutionalized aging for elders without urgent needs. The nursing homes that do remain should be monitored strictly by the CMS in adhering to social distancing measures.

KEYWORDS: eldercare, nursing homes, healthcare policy, community-based aging, COVID-19, China, U.S.

I. DEMOGRAPHICS AND AGING

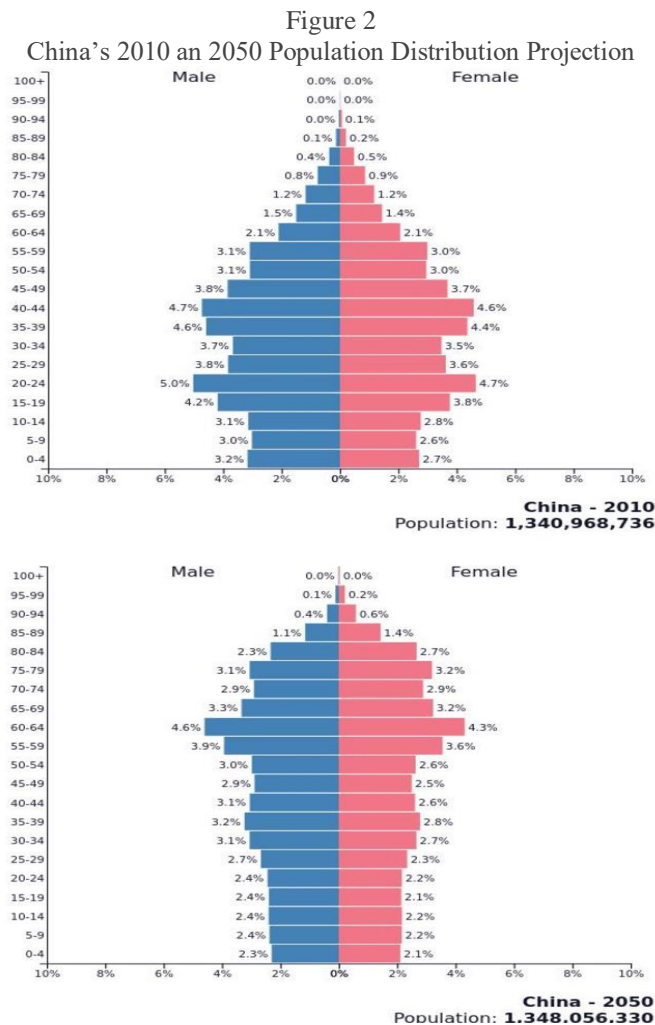
With improved technology and healthcare, the world has reached unprecedented high life expectancy rates across most countries. But this improvement also indicates a growing percentage of elderly. There were 703 million persons over the age of 65 in 2019, 9 percent of the total world population, which is predicted to increase to 1.5 billion in 2050 to make up for 16 percent of the population (Figure 1).¹ How governments deal with this urgent and challenging issue of aging would determine the future of countries as these elders constitute such a large percent of the population and the spending power associated with that. The two largest GDPs in the world, China and the United States, are no exception and both face this critical problem today but with its own unique problems and potential solutions.



As many in the baby boomer generation, a cohort of people born between 1945 and 1964, reach the age of 65, the U.S faces an unprecedented crisis of aging due to the large population of this generation. The number of

¹United Nations, *World Population Ageing 2010: HIghlights*, 6-7, 2019, accessed November 12, 2020, <https://www.un.org/en/development/desa/population/publications/pdf/ageing/WorldPopulationAgeing2019-Highlights.pdf>.

elderly over the age of 65 will almost double from today's 46 million to about 90 million in 2050, which would make up more than 20% of the population.² The disproportionate geographical distribution of elders will also make this problem even more serious in rural areas where elders reside in high proportions. While the U.S shares similar aging problems with most other developed countries, China has a very unique aging problem not only shaped by natural demographics as in other countries but also manmade policies. Under the New Republic formed in 1949, China did an exceptional job in decreasing the mortality rate significantly through public health campaigns along with increased fertility rates because of the government's rewarding policies, leading to a population boom. However, in 1970, fears of overpopulation led the government to enact the one-child policy, which would significantly decrease the birth rate and last for several decades.³ Although this policy was repealed in 2015, its effects are only in its infant stages and will likely hit China the hardest in about a decade. Today, there are about 250 million older adults over the age of 65 which is projected to soar to 500 million in 2050 to make up more than one-third of the population (Figure 2).⁴ Such a drastic transition from a young towards an aged society in just a century would pose many unprecedented challenges to the country.



²"Demographic Changes and Aging Population," Rural Health Information Hub, accessed November 12, 2020, <https://www.ruralhealthinfo.org/toolkits/aging/1/demographics>.

³Feinian Chen and Guangya Liu, "Population Aging in China," in *International Handbook of Population Aging*, by Peter Uhlenberg (Dordrecht, Netherlands: Springer, 2009), 157-158, accessed November 12, 2020, <https://www.springer.com/gp/book/9781402083556>.

⁴"Aging of China," *Wikipedia*, last modified October 15, 2020, accessed November 12, 2020, https://en.wikipedia.org/wiki/Aging_of_China.

These statistics have profound implications for virtually all aspects of society. With more elderly and fewer workers, taxation and welfare systems would likely have to be redesigned to support this new aging society. As more elders are in need of care, new conversations in family roles and responsibility would emerge as well as an increased demand on the healthcare system which will need to respond effectively and immediately. With COVID disproportionately targeting elders this year, there is even more need to divert more attention to elderly care as these pandemics not only affect elders but could also disrupt the wellbeing of a whole country if controlled poorly.

Healthcare & Insurance: The healthcare system in the U.S consists of both public and private insurance, unlike the single-payer public systems of Canada and the UK, which is supported by many but also raises problems and debates over whether the government should extend healthcare to all. Currently, Medicare is eligible for all elders over 65 who have previously paid into the system through taxes and takes care of most basic health services and drug prescriptions but does not account for the need of long-term care.⁵ The other government-funded healthcare program is Medicaid which is mainly for low-income people with terms and conditions varying across different states. The Massachusetts chapter of Medicaid, MassHealth covers the cost of almost all services based on the need of the elders from meal delivery services and in-home care to the room and board of public nursing homes.⁶ However, many elders also have private insurance which they prefer as that usually means less wait time and coverage for more services. To tackle the problem of the millions of uninsured Americans, the Obama administration issued the Affordable Care Act, attempting to make insurance more nationalized and public. The Trump administration has sought to cut back on this act attacking the individual mandate, which forces individuals not part of this new insurance plan to pay a premium annually. In the current presidential election, debates continue to happen, both within the Democratic Party and with President Trump as to how the healthcare system should evolve. Bernie Sanders offered a Medicare for All plan which is very similar to the nationalized healthcare systems of Canada and the UK in which insurance would be guaranteed to anyone but faces considerable criticism and concern on the future quality of care.⁷ For elders, a more nationalized insurance plan would definitely be beneficial as it ensures that all elders would have access to healthcare and no one would be denied insurance based on preexisting conditions. However, Sanders' Medicare for All Plan also includes guaranteed long-term care which is ideal for elders but unrealistic to implement. If long-term care were paid for, there would be unnecessary and extra demand for nursing homes and similar institutions which the current system that only accounts for about 5% of all elders cannot sustain. The quality of care for these nursing homes would also likely deteriorate without competition.

China's healthcare system has come a long way from barefoot doctors when the Republic formed that covered rural areas for the first time to universal healthcare insurance coverage today. Over the past few decades, public health and individual healthcare coverage have both improved drastically and went on to also cover the rural villages.⁸ However, many problems remain and one such is the disparity in resources between the rural and urban areas. The nationalized healthcare insurance system has made all of the best hospitals, which elders trust, all gathered in big cities like Beijing and Shanghai, to which elders have to travel often from far away. The long wait times at these public hospitals could also be of concern to elders, especially for those that cannot take care of themselves.⁹ Thus, although insurance is guaranteed for all, it is often impossible or very hard for those in rural areas to get the care they need due to the lack of community hospitals. Furthermore, historically, insurance has also been significantly different for urban and rural residents. The Integration of Urban and Rural Medical Insurance Scheme released in 2010 seems to be promising in the pilot cities by reallocating resources but only

⁵Medicare.gov, accessed November 12, 2020, <https://www.medicare.gov/>.

⁶Ali Cahill, telephone interview by the author, Phone Call, September 22, 2020.

⁷"Medicare for All: Last Week Tonight with John Oliver (HBO)," video, *Youtube*, posted by LastWeekTonight, February 16, 2020, accessed November 12, 2020, <https://www.youtube.com/watch?v=7Z2XRg3dy9k>.

⁸"Why China can provide 1.4 billion people with healthcare coverage," video, *Youtube*, posted by CGTN, June 14, 2019, accessed November 12, 2020, <https://www.youtube.com/watch?v=N6kuU5hNbCk>.

⁹"Why China," video.

time will tell if it can truly support the whole nation.¹⁰ Even more measures need to be taken to close this gap as rural areas have the highest percentage of elders and will determine the fate of China's future healthcare.

History of Aging Policies & Nursing Homes: In the U.S, homes specific for the elderly started in the 19th century where women and church groups wanted to separate their own elders from almshouses which were where the unwanted in society- orphans, insane, and homeless gathered. Despite these organizations, most impoverished elders still had no choice but to go to these almshouses which led the government to come up with social security pensions in the 1930s, which excluded those living in almshouses. The idea was that it would be more economically viable for elders to receive a pension check than to send all to poorhouses. Eventually, almshouses were successfully defeated and replaced by nursing homes, mostly private but also a few public. The implementation of Medicare and Medicaid in the 1960s continued to give rise to nursing homes, but 79% were private which raised many concerns including the problem of substandard care.¹¹ Then, in the 1980s and 90s, a series of reform and regulation acts were passed. In the Clinton era, policies compelled nursing homes to comply in order to participate in Medicare and Medicaid and also created a rewards system that directly tells potential customers the quality of care through a five-star rating conducted once every few years.¹² While there are still debates on how strict regulations should be and how to enforce them better, clearly, the stigma associated with elder homes is slowly fading away as more elders are willing to consider this option of stay. The majority of elders pay for their own nursing home stay and that money comes from their monthly social security checks, which 9 out of 10 elders over 65 receive. These social security checks are dependent on the taxes elders and their previous employers paid before which then comes back to them after retirement, averaging about \$1200 a month but could be more based on one's previous salary and tax.

Historically, China has always followed Confucian principles of filial piety where children care for their parents which worked in a mainly rural country of big families living together. However, the rapid industrialization in the past few decades has caused changes in demographics of having fewer children and also migration trends towards the cities, separating many parents from their children. The liberalization of the economy in the 1990s has also caused previous urban workers who were guaranteed everything by the state to have nothing which led the government to introduce the first social security system in 1997. The system is similar to that of the US where both workers and their employers have to pay into the fund in order to get income out of it when they retire.¹³ But the retirement benefits vary significantly for corporate employees and government employees (government-related, teachers), which the government is currently working on closing. Under the current system, government employees get twice the amount of pension than corporate employees, making their income even above the average wage. The urban pension is also significantly different from the rural pension- the earlier pays about 3000 rmb per month, half the average urban wage, while the rural only pays an average of 153 rmb per month, which is not sustainable, forcing elders to have to eat their own food from farms.¹⁴ Another concern for the system is that the retirement age of 60 for men and 55 for women was set in the 1950s where life expectancy was much lower. This retirement age is unsustainable for the rapidly aging population in China as the worker to dependent ratio would go from 3.1:1 in 2011 to 1.3:1 in 2050.¹⁵ There are some proposed measures now to slowly increase the retirement age to 65 by 2040 but no official policy has been released.

¹⁰Pei Liu, "The integration of urban and rural medical insurance to reduce the rural medical burden in China: a case study of a county in Baoji City," *BMC Health Services Research*, accessed November 12, 2020, <https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-018-3611-y>.

¹¹"History of Nursing Homes," Foundation Aiding the Elderly, accessed November 12, 2020, <https://www.4fate.org/history.pdf>.

¹²Kieran Walshe, "Regulating U.S. Nursing Homes: Are We Learning From Experience?," *Health Affairs*, accessed November 12, 2020, <https://www.healthaffairs.org/doi/full/10.1377/hlthaff.20.6.128>.

¹³"China's social security system," China Labor Bulletin, last modified October 15, 2019, accessed November 12, 2020, <https://clb.org.hk/content/china%E2%80%99s-social-security-system>.

¹⁴"China's social," China Labor Bulletin.

¹⁵Viola Rothschild, "China's Pension System Is Not Aging Well," *The Diplomat*, last modified March 6, 2019, accessed November 13, 2020, <https://thediplomat.com/2019/03/chinas-pension-system-is-not-aging-well/>.

Furthermore, the government needs to put more regulations on private enterprises so that workers could be guaranteed their insurance and pension which would be crucial as they age.

Overview of Aging Models: Institutional long-term care has existed for a while in the U.S, but there are many concerns regarding it, including dissatisfaction with the quality of care and also the high costs, giving rise to new models of aging and long-term care to satisfy the increasing demand. Currently, about 5% of elders live in nursing homes, 2% in assisted living facilities, and the rest at home. Although nursing homes may be convenient for care, the national average cost of \$80,000 a year could be unaffordable to most elders who do not have long-term care insurance.¹⁶ Thus, the cost and also desire for people to remain where they are in their last years urged both private firms as well as non-profit governmental organizations to develop alternative long-term care models. In Massachusetts, where most of my research was done, non-profit organizations help with delivering food and providing care in more rural areas based on elder needs with government funding while private organizations built senior-living communities, also known as Continuing Care Retirement Communities (CCRC). Most of these communities include multiple options, from independent living to assisted living to special care, and have different plans, some requiring large entrance fees (nonrefundable/ partially refundable) while others having more costly monthly fees. This model has influenced China and become models for most high-end aging communities in urban areas.

Currently, China has a 9073 model, which means 90% of elders age at home, 7% in community-based aging, while 3% age in nursing homes. This distribution has been the main model the country has been following in developing its aging system, focusing on aging at home, especially the family aspect, but also working to promote community systems and increase the availability of nursing home beds to satisfy the increased demand in the next few years. Real-estate companies have been the ones to act first, amassing large-scale funds from the government and getting land to build senior housing communities which is a risky but visionary investment. Elder care institutions have also stepped in to operate aging communities that will be able to accommodate different needs of elders based on their level of independence and not only provide basic care but also entertainment to truly transform these communities into their new home. Insurance companies are also investing in this new industry through a new model of insurance + care which would give them more capital to invest in this area.¹⁷ But most of these investors are still only serving the needs of the urban upper and middle class elderly instead of helping those that are poor and really in need of care.

Government-funded programs: The Boston Home in Dorchester, Massachusetts is a non-profit nursing home primarily serving elders with neurological diseases. Most of the elders that go to the home need a very high level of care and are supported by Medicaid which covers the cost of room and board there. Apart from that, the home also organizes many activities to help with the social and emotional lives of these elderly. Some of the elders may be able to pay for these activities and the home also fundraises to ensure that more elders can participate. Another special feature of the home is its use of technology - all of the elders there use wheelchairs but they have made wireless doors to elevators and also voice command to facilitate their lives. Although it is a non-profit government-funded home, some believe that the state government is not doing enough to help these elders. The home has worked with Mass Senior Care, an advocate of more long-term care funding, and gone to the statehouse in Boston to request for change. Right now, they are still working to receive more funds from the government so they can provide more to the elders and also increase the number and quality of staff. Massachusetts also has 26 Aging Service Access Points (ASAP) throughout the state to help with the concerns of the elderly while providing some care. Lifepath, the aging access point for the Greenfield Area, serves as a point-in-contact for elders and can connect them to many long-term care facilities. Additionally, they also have a Meals on Wheels program that delivers about 500 meals every weekday to elders in the surrounding community. Elders that qualify for MassHealth get these services for free while other elders usually pay a copayment for these services. The organization has more than 100 full-time staff but also benefits from the hundreds of volunteers in the area. Diane Robie, the Director of Client Services, believes that "healthier elders view this kind of volunteer activity as a form of social engagement and really benefit from it mentally." While

¹⁶Elaine K. Howley, "Top 5 Things to Know About Continuing Care Retirement Communities," U.S News, last modified September 17, 2018, accessed November 12, 2020, <https://health.usnews.com/wellness/aging-well/articles/2018-09-17/top-5-things-to-know-about-continuing-care-retirement-communities>.

¹⁷Lydia Chen, "China's Senior Housing - Now and the Future," ed. Vivienne Huang, Deloitte, accessed November 12, 2020, <https://www2.deloitte.com/content/dam/Deloitte/cn/Documents/life-sciences-health-care/deloitte-cn-lshc-seniorhousing-en-080616.pdf>.

there are many volunteers and organizations that fund Lifepath, it also receives some funds from both the federal and state government, specifically for each service it provides. The homes that are always fully occupied in China are the public government-funded ones that draw people because of their low prices. In 2014, the Beijing local government decided that every subdistrict in the city (approx 50,000 people/10,000 elders) must have a public elder home which led to the construction and opening of TianYi in 2015. Although the nursing home still runs for profit, it is significantly funded by the government- 50% of its \$500,000 construction cost and an additional \$3000 per bed are all paid by the government.¹⁸ With all of these subsidies, the government can limit the pricing of the nursing home, making it about \$900-1200 a month in total, a very affordable cost for people on the urban pension system. Additionally, the government also gives stipends to elders that have dementia or Alzheimer's or are over the age of 90 a fund of \$100 a month. The affordable pricing of the home makes all of the 60 beds (in triples and quadruples) occupied most of the time while still providing a comfortable level of care to the elders. In 2019, the government has also made a rewards system that would give nursing homes more funding based on surveys assessing elder's satisfaction, credibility of the home, and quality of care. Overall, Beijing's new plan on a home in every subdistrict has been a success in giving a home to many old elders (80+) who really need care. There should be more similar measures like these as it not only benefits elders but also gives opportunities for operators.

Private Aging Programs: A very popular form of retirement and nursing home in China's urban areas today is a product of the collaboration between Fortune 500 real estate and insurance companies with the government. The large capital and investment capabilities of these companies, along with their close connections with the Chinese government, allows them to amass large chunks of land to build their massive aging projects while still getting significant funding from the government, up to \$3000 per bed. Inspired by retirement communities in Phoenix City, Arizona and Japan, Taikang Insurance has taken this model and adapted it to China's high-end aging market, currently operating and building over 20 projects all over China. The first and biggest community opened in the suburbs of Beijing (45-minute drive to downtown) in 2015 which currently houses 3000 elders. At this size, the resources are abundant with a 5-minute walk to a 1000-acre park, swimming pool and gym, arts and crafts room with many classes throughout the week, theaters, and a hospital within the community (Figure 3 of a picture of Taikang blueprint). Furthermore, the large scale of Taikang communities also produce economies of scale, reducing the cost per bed as well as per person operating costs. As an employee says, "we want to create the best possible community for the retired elites of China to live comfortably and enjoy all their time with all of the activities."¹⁹

Figure 3
Birds Eye View of Taikang YanYuan (Beijing)



¹⁸Han, telephone interview by the author, Wechat, September 25, 2020.

¹⁹Wang, interview by the author, Taikang YanYuan, Beijing, China, October 7, 2020.

However, for elders to enjoy this kind of vibrant and luxurious retirement life, they have to make a large investment. The signature of Taikang, as it is an insurance company, is the down payment or insurance plan that people have to buy which ranges from \$150,000 in smaller cities up to almost a million in larger communities like Beijing. While this price may seem exorbitantly high for most elders, Taikang is also targeting currently working people to buy this insurance plan that would guarantee entry to the community for both them and their parents.²⁰ These plans also have some policies on refundability which could range from 80-90% but also 100% if one wants to move away from the community within three months of entry or have already lived for three years. Apart from the entrance fee or insurance plan, there are also monthly fees for the rooms based on the size, usually from 800 square feet to 2000 square feet, which ranges from \$2000-5000 (for a room of two people) along with a \$300 per person food fee. For an elder that needs more care and lives in the hospitalized part of the community, the care and room fee adds up to about \$4000 per person.²¹ This monthly fee is only for the operation of the community while it is the insurance plans and entrance fees that allow Taikang to have so much capital to invest in new projects as 15 are opening soon in the next three years all over China (Figure 4). While Taikang's communities in Shanghai and Beijing have been fully occupied and even have long lines waiting for entry, it is uncertain if elders in relatively smaller cities would have the wealth to buy these insurance plans and move in. Another interesting new plan of the community is the option for elders to move around in the different communities year-round as Taikang is currently building resorts in popular tourist destinations.

Figure 4
Taikang Sites Opening Soon



In the U.S, there are also many chains for private nursing homes, but most companies like to keep the size of each home relatively small at below 100 while having hundreds of sites, which could be because of the more spread-out geographical distribution. But even with hundreds of homes across the nation, companies still emphasize the “home” aspect of their communities, making them more like big family houses with unique local traits instead of chain-like apartment complexes. In the New England area, Senior Living Residences has 17

²⁰Wang, interview by the author.

²¹Wang, interview by the author.

sites ranging from independent living and assisted living to memory care. The flagship, Compass on the Bay, located in South Boston, houses 55 elders and is one of the first nursing homes under the model of assisted living, something between independent living and a nursing home, as the CEO realized that only a few need severe intervention in their living.²² The rooms cost around \$8000 monthly, a high fee that elders have to either pay from their savings or get assistance from their children. But with this high cost also comes specialized care for the elderly. The home works with researchers at Boston University on Alzheimer's disease to make Mediterranean brain-healthy diet plans for the elderly, specifically ones that have Alzheimer's, plans social activities daily, and designs rooms in soft colors to make them feel better emotionally and mentally. Compass on the Bay also works with Programs of All-Inclusive Care for the Elderly (PACE) which pays for the room of elders, who have a monthly income of below \$2400 and are certified by the state to need nursing home care.²³ This collaboration is also seen in many other private nursing homes with a small portion of the rooms, about 10%, dedicated to elders who are paid by state or national programs. With the high monthly cost of these private aging programs, many elders who go are still in need of some form of care as opposed to completely independent elders, seen in a bigger proportion in China.

Modern Policies for Aging Problems: While the material needs of China's elderly are becoming more or less satisfied with the improvement of the social security program in the past decade, the emotional needs of the elderly remain largely unconsidered. As Lizhengxiang, 72, says, "My spending is limited. I'm poor in spirit rather than materially."²⁴ Because of the migration of China's youth to the cities and the one-child policy, many elders in rural China like him do not have anyone to talk to or care for them. Studies have shown that social isolation could increase the risk of diseases for the elderly, especially for those with Alzheimer's.²⁵ Furthermore, it is unacceptable that China, a country rooted in filial piety, would have the situation reversed and no one caring for the elderly. Thus, the government passed the Elder Rights Law in 2013 which states that children have to visit their parents frequently and could be subject to fines or even imprisonment for failing to do so.²⁶ Although there are no specific consequences and the circumstances could vary for every family, the law is more important in that it raises awareness and places the importance of family care for elders above all else. It serves more as a reminder for children to care for the elderly but it could also become the starting point of many lawsuits filed by elder lawyers. With this law, the government highlights that although many aging programs are developing, home care is still the center of aging, and family the center of home care.

But for many children that could not abandon their work in the city to return home, the government has also started to think of other solutions when family care could not be possible. ChangJiang 265 is a welfare foundation to help the left-behind elderly in rural areas and hires volunteer caretakers who get a decent salary. These volunteers care for about 30 elderly each and are often from the villages, building a special connection with the elderly. After having a volunteer, Lizhengxiang is very grateful and says, "If it were not for him, I may have never gotten up and would have spent the rest of my life in the dark."²⁷ While it may be challenging to build nursing homes in rural areas due to high construction costs as well as the reluctance of elders to leave their homes, home care in the villages with local volunteers seems like a promising solution. A major problem for U.S nursing homes is their reputation, which has gotten much better over the past century but still holds a lot of stigma. In the 1970s and 80s where the number of nursing homes boomed, mostly from private investment, there were also many cases of abuse reported, alerting the government to put more regulations.²⁸ As a result, the

²² Jenna Petrenko, telephone interview by the author, Phone Call, September 17, 2020.

²³Petrenko, telephone interview by the author.

²⁴Mmm, ed., "China Focus: Home-based elderly care deepens in rural China," *XinHua*, last modified February 9, 2019, accessed November 12, 2020, http://www.xinhuanet.com/english/2019-02/09/c_137809319.htm.

²⁵Evandro Fei Fang, "A research agenda for aging in China in the 21st century," *National Library of Medicine*, accessed November 12, 2020, <https://pubmed.ncbi.nlm.nih.gov/26304837/>.

²⁶Edward Wang, "A Chinese Virtue Is Now the Law," *The New York Times*, last modified July 2, 2013, accessed November 12, 2020, <https://www.nytimes.com/2013/07/03/world/asia/filial-piety-once-a-virtue-in-china-is-now-the-law.html>.

²⁷Mmm, "China Focus," *XinHua*.

²⁸Walshe, "Regulating U.S.,".

Nursing Home Reform Act was passed in 1987 and the Clinton era saw more reforms that would make nursing homes more responsible and have to conform to a set of national, as well as state, guidelines. As part of the regulations, the Center for Medicare & Medicaid Services (CMS) was set to inspect these nursing homes periodically and to give a score based on a five-star standard that would be shown to customers.²⁹ Although there are still many concerns over the validity of this rating, constant reform over the past few decades and the more emphasis placed on nursing home quality will likely further improve nursing home conditions in favor of elders.

COVID and Aging: This year, the coronavirus pandemic, which has swept virtually all areas of the world and disproportionately targeted elders in terms of death rate, would compel all countries to make changes to its aging system. From the start of the pandemic in the United States, nursing homes became the primary source of death. In Life Care Center of Kirkland, Washington, two-thirds of all residents and staff tested positive and 37 died while family members waited for them helplessly outside.³⁰ This incident is not the only case of poor nursing home management that has caused many elder deaths but a phenomenon that has swept many nursing homes all over the country, responsible for up to 60,000 elder and staff deaths in America. While the coronavirus has alarmed everyone about the dangers and atrocities of nursing homes, it is simply a result and exposure of all of the deficiencies in the care and control of these facilities. As Richard Eskow, a former nursing home employee and current policy consultant, says, "There were more than 1,246,000 people in certified American nursing homes in 2019. But they have no senators, no members of Congress, nobody to speak for them."³¹ Most for-profit nursing homes treat these elders like disposable objects and have no financial incentive, whatsoever, to care for their lives or improve safety standards. Thus, for people to regain confidence in nursing homes and assisted living facilities, major reforms have to take place.

While it may sound safer for elders to live at home, for many, the nursing home is their home as they have no other place of shelter and need the extensive care that nursing homes can provide. For the assisted living facility Compass on the Bay in Boston, Jenna Petrikns, the Executive Director, believes that although closing the nursing home to new entries would reduce the possibility of infection, they cannot do so morally, knowing that the elders would have nowhere else to go. Furthermore, for elders with memory problems, self-isolation could increase the risk of falls which would lead to hospitalization where the risk of contracting COVID is even higher.³² For these facilities, they also face dilemmas, morally and financially, making it challenging to develop concrete safety protocols. For elders aging at home or in communities, their lives have also changed drastically from the quarantine orders which put a halt to all in-person social activity which many elders relied on to stay healthy. Day by day, they have either heard on the news or personally of friends or relatives dying which makes the concept seem even closer to them. Despite the high risks, many elders have reported social needs to be even more urgent in times of uncertainty like this. Patricia Griffin, 80, says, "That makes me angry because I don't have that many years left. And I would like to do the things I want to do. At the moment, I'm leaning toward being cautious but not being completely a prisoner."³³ But elders have also found ways to embrace technology to connect virtually, something many have not been as accepting towards before the pandemic. Harry Hudson,

²⁹Walshe, "Regulating U.S.,".

³⁰Mike Baker, "Nursing Home Linked to 37 Coronavirus Deaths Faces Fine of \$600,000," *The New York Times*, last modified April 2, 2020, accessed November 12, 2020, <https://www.nytimes.com/2020/04/02/us/virus-kirkland-life-care-nursing-home.html>.

³¹Richard Eskow, "Nursing home COVID-19 death tolls reveal America's shameful elder-care crisis," NBC News, last modified August 23, 2020, accessed November 12, 2020, <https://www.nbcnews.com/think/opinion/nursing-home-covid-19-death-tolls-reveal-america-s-shameful-ncna1237023>.

³²Petrenko, telephone interview by the author.

³³Shanoor Servai, "How Has COVID-19 Changed Health Care for Older Americans?," The Commonwealth Fund, last modified April 17, 2020, accessed November 12, 2020, <https://www.commonwealthfund.org/publications/podcast/2020/apr/how-has-covid-19-changed-health-care-older-americans>.

72, says, "Older friends are coming out of the woodwork. Everyone is Zooming and making calls. People are more open and vulnerable and willing to share than before."³⁴ This new attitude towards technology is likely to continue after COVID and would impact the lifestyle of the elderly as well as related businesses. Although COVID sparked in China in late January and early February, the government took immediate action for all nursing homes to close down to the public. Beijing is proud to announce that there have been no cases of nursing home infection. The more centralized government in China allows for a direct response that all nursing homes have to follow instead of having to consult with state governments, who are at other times, in charge of regulating these facilities. While elders have suffered emotionally from not being able to see their families for Chinese New Year, the staff found ways to introduce the elderly to online video apps, like Wechat to video call their family and TikTok to stay better connected with the world and be entertained.³⁵ To make up for the loss in profit for nursing homes and increased work time for staff, local governments are giving many subsidies such as exemption from rent for three months. An employee in ChunXuanMao nursing center in Beijing believes that the Chinese government's immediate response will make institutional care even more popular in a post-COVID world as families will know that these nursing homes get the best safety equipment from the government and can provide the care that elders would not get otherwise being stuck at home.³⁶

For the vast majority of elders that age at home, COVID has completely changed their lives to be more willing to use technology, a phenomenon known as the silver tech revolution for businesses. When COVID first hit, many elders panicked about where to get food and downloaded apps with the help of their children but still in doubt whether it could bring the same quality of food. However, after months of this new lifestyle, the elderly are ordering food everyday and many find it to be replaceable to going to supermarkets and even formed groupchats to send tech advice and group discounts. Technology has not only taken a role in meeting their daily needs but also became an opportunity for socialization as elders spend more time than ever on their phones. For tech companies, COVID has been a game changer as sales increased from 50 to 80%, mostly from elders. Even when COVID is over, they will definitely continue to target this population and make products and programs that would be elder-directed.³⁷

Policy Suggestions: These suggestions are my personal opinions for the field of aging in both countries based on my few months of research and interviews. However, without any prior knowledge on healthcare and public policy, these points are not made based on professional analysis or research but just from my own thoughts, which should be taken into consideration when reading through. In urban China, the private nursing and retirement home industry is booming with support from the government but there are two essential problems. These homes are often expensive, only serving for the most wealthy elders, and most are isolated from the city. Combined, it means that elders have to sell their property and leave the place they have lived in for decades just to go to a new home which many are reluctant to do. Thus, a potential solution could be to develop similar retirement communities in already-existing communities in downtown areas that have large elder populations. In Beijing, every neighborhood has a government committee that takes care of all the affairs of its residents. But to develop a better and more comprehensive community-based aging system, it has to be in a similar form as the nursing homes of government funding and regulating private businesses to do so. In each neighborhood that may have large elder populations, the committee should work closely with the property management teams of all apartments in the area to devise a plan. The property management team could work on internal renovations of each unit to improve the quality of care and safety by installing elder-friendly doors, toilets, and kitchenette and also putting motion detectors and emergency reporters, at the elders' wish, to better safeguard their wellbeing, including whether they have taken medication, locked their door, or need help. Being controlled directly by the property management team would make it more convenient and also cheaper for elders, many of whom are already purchasing private plans with companies that can monitor behavior on an individual basis. If whole

³⁴Servai, "How Has COVID-19," The Commonwealth Fund.

³⁵Lu Yan, "Nursing homes in China deal with the novel coronavirus with resourcefulness," *Beijing Review*, last modified August 28, 2020, accessed November 12, 2020, http://www.bjreview.com/Nation/202008/t20200828_800219030.html.

³⁶ LiYan Zhang, telephone interview by the author, Wechat, September 11, 2020.

³⁷YiYang Fan, "How COVID-19 Sparked a Silver Tech Revolution in China," *Sixth Tone*, last modified March 12, 2020, accessed November 12, 2020, <https://www.sixthtone.com/news/1005303/how-covid-19-sparked-a-silver-tech-revolution-in-china>.

communities adopt this new plan, the property management team could also seek subsidies from the government to make it more affordable. For large-enough neighborhoods, the property management teams of different apartments could work together to find gyms, parks, social gathering locations, and dining services, which would be much cheaper on a centralized basis. While most of the above aspects that retirement home communities have could be managed on a private basis by management teams, other aspects like healthcare need the intervention of the neighborhood committee. Solutions could be having a small team of health personnel, hired by the government committee but paid by private companies, to establish a small clinic that could take care of elders' health issues more conveniently while also having direct connections with local hospitals for more serious problems. But for this plan to succeed, many challenges have to be overcome, including how to negotiate with elders already having private aging plans with tech companies and caretakers and how to make every elder in the community agree to accept the new plan and pay monthly.

For rural areas in China, the above-mentioned proposal is not plausible as the elders receive significantly less social security benefits (so they cannot afford this type of care) while they are also populated more sparsely, meaning that there are no neighborhood committees or property management teams. Furthermore, the aging situation in the rural areas is worse as there is rarely any form of institutional aging and most elders have their children working in the cities. But this unique problem also brings a specific solution that would increase employment, benefit elders, and also be sustainable in its cost for the government. Already experimented by the ChangJiang 265 welfare foundation, each village could have a young and healthy caretaker to stay home and look after all the elders in the village (could go up to 30 as they do not need significant care).³⁸ Although the modern industrial economy of China does not allow for the tradition of filial piety, elders would still be happy to be cared for by people from their own village whom they feel attached to and could trust. The caretaker could be anyone from the village looking for a job that has the patience and willingness to go to a training program, which could be set up by the government, to learn skills necessary. Their main job would be to help the daily living of elders, including showering, food, and cleaning, but could also monitor their safety and report to hospitals in the area, as well as organizing social activities to increase bonding in the village. This position would be appealing as caretakers could stay home in their village and still be paid by the government or welfare organizations. In addition, caretakers could promote a healthy lifestyle for elders in rural areas which would drastically improve their lives and reduce the risks of chronic diseases and related expenses. The training program of caretakers could include learning to cook low-sodium meals, help elders quit smoking, and design exercises suitable for elders.³⁹ Altogether, elders' lives in rural areas would improve significantly if there was a caretaker in each village to satisfy their basic needs and improve their health.

Another concern about aging in China is that the growing number of elderly, who are likely to spend less, will slow down the economy. But COVID has proven that the silver economy is just starting and companies will find new ways to appeal to elders who would make up the bulk of the spending power in the next few decades. Engaging this generation of elders would be crucial for China's economic development. The aging system in the U.S has been developed for a longer time and is in a later stage than that of China but the coronavirus shows that it still has many problems. The high death rates of nursing homes will likely make them the last option for elders and their families, thus projecting a decline in the proportion of elders aging at institutions for the next few years. Those who continue to go to nursing homes would most likely be elders who really need extensive care. Thus, it is implausible for nursing homes to be completely eradicated, but major reforms must take place both from the government and internally in these homes. During this pandemic, most of the nursing homes were cleared for safety hazards by government inspectors deployed by the CMS but would have thousands of cases and deaths. Clearly, the regulations are not enough and these profit-driven nursing homes are rarely being fined for many safety protocols that they have evaded for years.⁴⁰ The pandemic strongly signals that the CMS must assert a stronger stance towards these nursing homes and not only punish homes through fines but truly transform their infection-control protocols through frequent unannounced visits and cut off funding when it does not meet regulations which nursing homes have to take into consideration in order to survive in the long-term.

³⁸Mmm, "China Focus," *XinHua*.

³⁹Fang, "A research,".

⁴⁰Debbie Cenziper, Joel Jacobs, and Shawn Mulcahy, "As pandemic raged and thousands died, government regulators cleared most nursing homes of infection-control violations," *The Washington Post*, last modified October 30, 2020, accessed November 12, 2020, <https://www.washingtonpost.com/business/2020/10/29/nursing-home-deaths-fines/>.

But the government also needs to more rapidly gather resources and emergency equipment to send to these nursing homes in a more centralized manner as China did from the start of the pandemic. Apart from these regulations, nursing homes can also undergo renovation and consider new design plans when building new sites that would make it safer and attract more families. These new designs should mostly be smaller in size and built so that elders can socially distance and also be in close contact with nearby medical resources. With these reforms made from the government and within the nursing homes, a pandemic like COVID would still be fatal but would not hit the system unprepared and lead to as many deaths. To respond to the rising need for community and at-home aging programs both from the rising number of elders as well as their reluctance to go to nursing homes, the government must invest more in this area earlier on in elders' lives which would also be more affordable than paying for costly nursing home stays later. Currently, Programs of All-Inclusive Care for the Elderly (PACE) works with the Medicaid program of many states to give care to elderly who are eligible to stay in nursing homes and for Medicaid to instead age in place which is both cheaper for the government and happier for the elders.⁴¹ It also gives the option for elders not eligible for Medicaid to pay privately which is also significantly cheaper than private nursing or retirement homes. PACE seems like a promising solution for the at-home aging population and should expand into more states from the already 24 active and 12 in-development states to make this form of aging possible and affordable for the whole country.

II. CONCLUSION:

While I have learned a lot from my research and talks, there are still many questions that I hope to answer in the future through more research and courses in college. In terms of the role of the government, I want to know more about the specific roles that the federal and local government has in framing policies and how nursing homes, public and private, have to follow them. By learning more about economics, I also hope to have a clearer sense of what a silver economy actually looks like, and how welfare programs could still be supported.

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